

Case Study: U.S. Navy Apprentice Technical Training School

08/03/2009



Research & Evaluation Team

research_eval@adlnet.gov

Introduction

All U.S. Navy personnel requiring basic electrical knowledge and troubleshooting training complete Apprentice Technical Training (ATT) school at the Center for Surface Combat Systems (CSCS) at Great Lakes after completing boot camp. This case study highlights the benefits afforded to the Navy by moving to online instruction.

Instructional experts have noted that one of the drawbacks to traditional classroom instruction is the potential for 'curriculum drift,' where there are variations in the design and presentation of course material based on the instructors' backgrounds and past experiences (Roberts & Dodds, 2008). Prior to the launch of the ATT School, the U.S. Navy conducted basic electronics courses at 13 locations with different instructors using a variety of curriculums and instructional approaches. The ATT director for the CSCS Learning Site noted that the goal of the training transformation was "to take reusable learning objects and mold them into one curriculum" (Kowalski, 2006).

To help achieve this goal, ATT converted its training from a traditional instructor-led classroom approach to residence-based, facilitated, self-paced online learning. The resulting Web-based modules were derived from and delivered the same objectives as the classroom instruction.

Each workday, trainees report to a computer lab in an organizational facility where they engage in training as part of their duty positions. Facilitators staff the computer labs and are available to answer trainees' questions. Trainees can spend as much time as they need reviewing each module, but cannot progress to the next module until they demonstrate knowledge of the material on a post-training test. The courses are also available outside of the classroom, in learning resource centers, which are accessible within trainees' living quarters. Extra study time is also provided as a form of remediation for those trainees whose pace exceeded expected completion times.

Benefits of Moving to Online Instruction

In addition to limiting the potential for curriculum drift, when Sailors receive identical training content, it

facilitates their technical communication during deployments because they share a common instructional background (Kowalski, 2006).

The move to self-paced online learning has also led to additional benefits for the U.S. Navy. Initial data based on 11,836 trainees in a variety of technical ratings showed that on average, Sailors completed their training in approximately half of the legacy classroom time. Moving Sailors through at a faster pace contributes to fleet readiness by helping to reduce the bottlenecks of trainees waiting to get a seat at ATT.

Additionally, most of the Navy technical ratings have an automatic promotion to E-4 upon graduation from training. As such, the time savings afforded by online instruction also contribute to earlier promotions (Koerner, 2007). As past research has linked promotion with retention (Carson, Carson, Griffeth, & Steel, 1994), earlier promotions likely increase the return on the U.S. Navy's training investment in technical training as more Sailors elect to sign up for additional service.

References

- Carson, P. P., Carson, K. D., Griffeth, R. W., & Steel, R. P. (1994). Promotion and employee turnover: Critique, meta-analysis, and implications. *Journal of Business and Psychology*, 8, 455-466.
- Koerner, S. (2007). Engineering students full speed ahead with improved CBT. Retrieved June 9, 2009 from http://www.navy.mil/search/display.asp?story_id=28598
- Kowalski, E. (2006). ATT course reaches next milestone, sets new graduate record. Retrieved June 9, 2009 from http://www.navy.mil/search/display.asp?story_id=24640
- Roberts, E. J., & Dodds, P. V. W. (2008). On search and discovery: The ADL object registry and repository infrastructure. Retrieved June 23, 2009 from <http://www.academicolab.org/newsletter/ADLnewsletter.html>